

Work Order ID 151508

Tuesday, September 27, 2016 11:54:51 AM

151508

Page 1

Item ID: D3874-2L08 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Floor Protector - Pilot Clear
Start Date: 9/22/2016 Start Qty: 3.00 ***3*** Cust Item ID:
Required Date: 9/27/2016 Req'd Qty: 3.00 ***3*** Customer:
Reference:

Approvals: Process Plan: **DAS 21** Date: **SEP 28 2016** Tooling: Date: Run Start ***NR1***
QC: **9-89** Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3874	B								DAS 07 9-89
100		0.00							
100									
HandThermo	Memo	0.10				<u>x 3</u>			<u>16/10/05</u>
Hand Finishing Thermoforming	1-Cut Sheet to required Blank size								
105		0.00							DAS 07 9-89
105	Dry Material								
HandThermo	Memo	0.00				<u>x 3</u>			<u>16/10/05</u>
Hand Finishing Thermoforming	Dry Sheet as per QSI022 POLYCARBONATE								
	Temp: 245 deg								OCT 04 2016
	Time IN: 5:00 PM								Per.....
	Time OUT: 6:00 AM								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By 03 03	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval 03 03	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Tuesday, September 27, 2016 11:54:51 AM

Page 3

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC5- Inspect part completeness to step on W/O	0.00							
160									
QC	Memo	0.01				3			DAS 38 9-89 OCT 11 2016
Quality Control									
170	Identify as per dwg & Stock Location: <u>51425</u>	0.00							
170									
Packaging	Memo	0.00				3	DAS 6 9-89		OCT 14 2016
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.05					DAS 21 9-89		OCT 14 2016
Quality Control									
							DAS 21 9-89		OCT 14 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Tuesday, September 27, 2016 11:54:50 AM

Page 1

Work Order ID: 151508

151508

Parent Item: D3874-2L08

D3874-2L08

Parent Item Name: Floor Protector - Pilot Clear

Start Date: 9/22/2016

Required Date: 9/27/2016

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP Rev C Added Color to D3874-2 14/07/02 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.118-90318-08		Purchased			No	100	sf	877.0656	4.38	13.83158			DAS 07 9-89

MI FXS 118-90318-08

Lexan Sheet (Clear)

Location

Loc Qty

Loc Code

therm

877.06564

m126994

877.06564

13.84 *sf ft*

14/10/06

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

DART AEROSPACE LTD		Work Order: 151508
Description: Floor Protector		Part Number: D3874-2
Inspection Dwg: D3874	Rev: A/B 01	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>N/A</u> "				
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

DAS

Measured by: 07
9-89

Date: 16/10/05

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.050	Min	0.059"	✓			
0.065	Min	0.082"	✓			
0.5	Min	0.522"	✓			
21.9	REF	21.9"	✓			

DAS

Measured by: 07
9-89

Date: 16/10/06

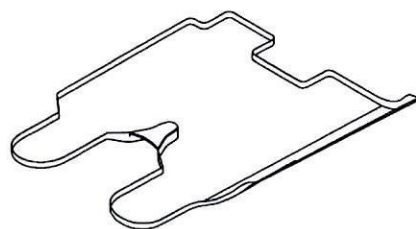
Audited by: 38
9-89

Date: OCT 11 2016

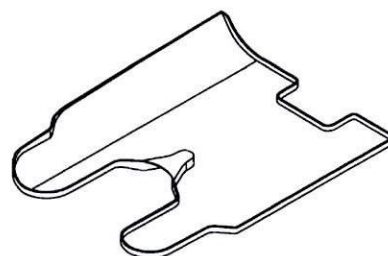
Prototype Approval: N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	



D3874-1LXX FLOOR PROTECTOR



D3874-2LXX FLOOR PROTECTOR

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 151508 MWS

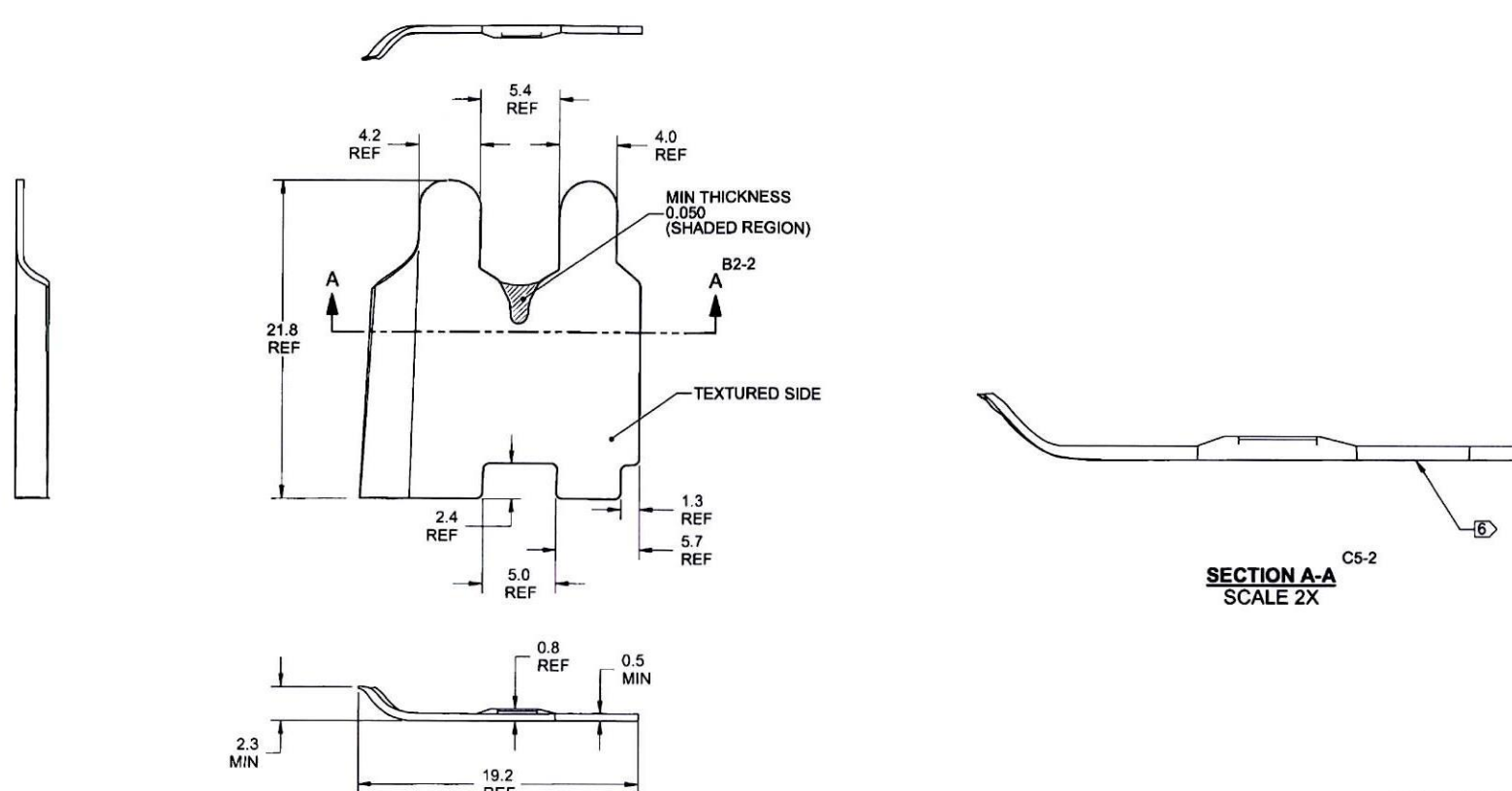
1609-28

RELEASED
2014-06-17
AM

B	ADDED D3874-1L02 AND D3874-2L02 CONFIGURATIONS AND RE-IDENTIFIED D3874-1 AND D3874-2 AS D3874-1L08 AND D3874-2L08. REVISED NOTE 1 AND ADDED MATERIAL TABLE.	AK	14.04.10
A	NEW ISSUE	PH	09.01.29
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	DL	D3874	SHEET 1 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FLOOR PROTECTOR	NTS
DATE	14.04.10	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

APPROVED

8 7 6 5 4 3 2 1



SECTION A-A
SCALE 2X

D3874-1LXX FLOOR PROTECTOR

RELEASED
2014-06-17

- NOTES:**
- 1) MATERIAL: SEE TABLE **B**
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3874-1LXX" USING VIBRATING STYLUS
 - 7) WEIGHT: 1.5 lbs
 - 8) TOOLING: THERMOFORM PER MOLD DT9474 PER DART QSI 022. TRIM PER MOLD
 - 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.065" ELSEWHERE EXCEPT AS SHOWN

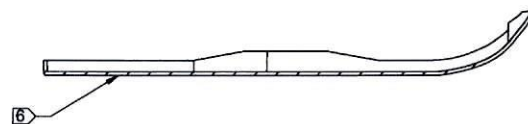
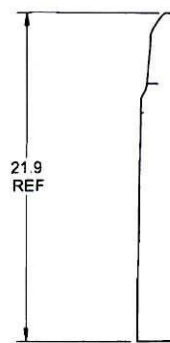
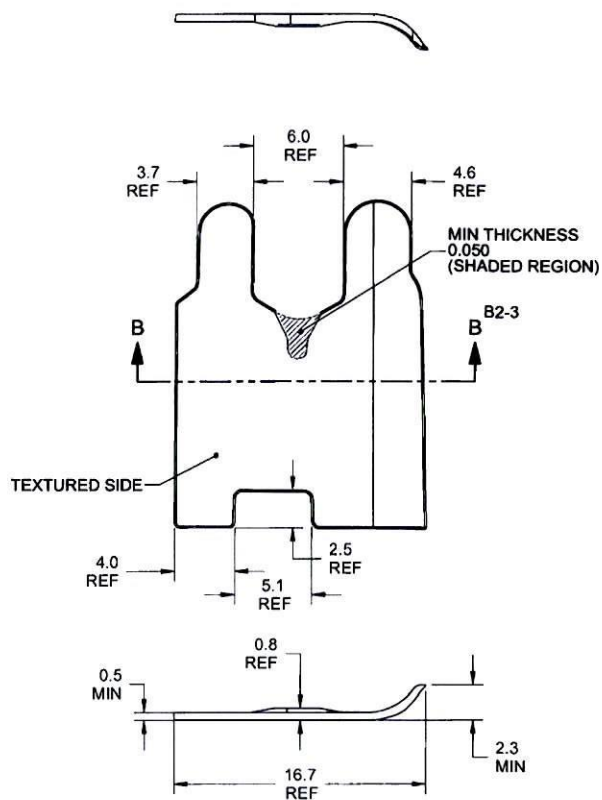
B	
PART NUMBER	DESCRIPTION
D3874-1L02	F6006 SUEDE/POLISHED 701 BLACK LEXAN SHEET 0.125 THICK (REF DART SPEC MLEX.125-F6006-02)
D3874-1L08	90318 PROTECT-A-GLAZE 112 CLEAR LEXAN SHEET 0.118 THICK (REF DART SPEC MLEX.118-90318-08)

APPROVED

DESIGN	AK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	DL	D3874	SHEET 2 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	FLOOR PROTECTOR	NTS
DATE	14.04.10	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR DOWNLOADED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



SECTION B-B
SCALE 2X

D3874-2LXX FLOOR PROTECTOR

RELEASED
2014-06-17

- NOTES:**
- 1) MATERIAL: SEE TABLE
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3874-2LXX" USING VIBRATING STYLUS
 - 7) WEIGHT: 1.5 lbs
 - 8) TOOLING: THERMOFORM PER MOLD DT9474 PER DART QSI 022. TRIM PER MOLD
 - 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.055" ELSEWHERE EXCEPT AS SHOWN

PART NUMBER	DESCRIPTION
D3874-2L02	F6006 SUEDE/POLISHED 701 BLACK LEXAN SHEET 0.125 THICK (REF DART SPEC MLEX.125-F6006-02)
D3874-2L08	90318 PROTECT-A-GLAZE 112 CLEAR LEXAN SHEET 0.118 THICK (REF DART SPEC MLEX.118-90318-08)

DESIGN	AK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3874 TITLE FLOOR PROTECTOR DATE 14.04.10
DRAWN	AK	
CHECKED	RF	
MFG. APPR.	DL	
APPROVED	HS	
DE APPR.	DS	REV. B SHEET 3 OF 3 SCALE NTS

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8 7 6 5 4 3 2 1